

Safety Data Sheet

Revised: 20.02.2006

Publication No.
XRB228E(EN)

01. Identification of the substance / preparation and of the company

Product: TRW Brake Cleaner, 5 Liter can
Use: Brake Cleaner
Company: TRW KFZ Ausrüstung GmbH Rudolf-Diesel-Str. 7 56566 Neuwied
Phone: (+49) 02631-912 0
Fax: (+49) 02631-912 110
Emergency phone: (+44) NHS 0845 46 47

02. Composition / Information on ingredients

Substance	EINECS/ELINCS	CAS	Range [%]	Symbol / R-phr.
n-Hexane	203-777-6	110-54-3	2,5 - < 5	N-Xn- F-11-38-48/20-51/53-62-65-67
Naphtha (petroleum), hydrotreated light	265-151-9	64742-49-0	50 - < 100	N- F-Xn-11-38-51/53-65-67

03. Hazards identification

R 11: Highly flammable. R 38: Irritating to skin. R 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R 65: Harmful - may cause lung damage if swallowed. R 67: Vapours may cause drowsiness and dizziness.

04. First aid measures

General information Change soaked clothing.
Inhalation Ensure supply of fresh air. In the event of symptoms seek for medical treatment.
Skin contact In case of contact with skin wash off immediately with soap and water. Consult a doctor if skin irritation persists.
Eye contact In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.
Ingestion Do not induce vomiting. Rinse out mouth and give plenty of water to drink. Supply with medical care.
Advice to doctor If swallowed or in the event of vomiting, risk of product entering the lungs.

05. Fire-fighting measures

Suitable extinguishing media: Foam. Dry powder. Water spray jet. Carbon dioxide.
Extinguishing media that must not be used: Full water jet.
Special exposure hazards arising from the substance or preparation itself or combustion products: Risk of formation of toxic pyrolysis products. Carbon monoxide (CO). Not combusted Hydrocarbons.
Special protective equipment for firefighters: Use self-contained breathing apparatus.
Additional information: Cool containers at risk with water spray jet. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

06. Accidental release measures

Personal precautions: Ensure adequate ventilation. Keep away sources of ignition. High risk of slipping due to leakage/spillage of product.
Environmental precautions: Do not discharge into the drains/surface waters/groundwater. Prevent spread over a wide area (e.g. by containment or oil barriers).

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Methods for cleaning up: Take up with absorbent material (e.g. sand). Dispose of absorbed material in accordance with the regulations.

07. Handling and storage

Advice on safe handling: Provide good room ventilation even at ground level (vapours are heavier than air). Use solvent-resistant equipment. Keep only in original container.

Advice on protection against fire and explosion: Keep away from sources of ignition - Refrain from smoking. Ignitable mixtures can form in the empty container. Take precautionary measures against static discharges.

Requirements for storage rooms and vessels: Vapours can form an explosive mixture with air. Provide solvent-resistant and impermeable floor.

Advice on storage compatibility: Do not store together with oxidizing agents.

Further information on storage conditions: Keep container tightly closed. Keep container in a well-ventilated place. Protect from heat/overheating.

08. Exposure controls / personal protection

Additional advice on system design:

Ensure adequate ventilation on workstation.

Ingredients with occupational exposure limits to be monitored: (GB)

Substance	[ppm]*	[mg/m ³]*	General remarks:
Naphtha (petroleum), hydrotreated light		1200	
n-Hexane	20	72	72,80,88,96

* LTEL: Long-term exposure limit

Respiratory protection: Breathing apparatus in the event of high concentrations. Short term: filter apparatus, filter A.

Hand protection: Butyl rubber, >120 min (EN 374).

Eye protection: Safety glasses.

Skin protection: Solvent-resistant protective clothing.

General protective measures: Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols.

Hygiene measures: Cloths contaminated with product should not be kept in trouser pockets. Do not eat, drink, smoke or take drugs at work. Wash hands before breaks and after work. Use barrier skin cream.

Delimitation and monitoring of the environmental exposition: not determined

09. Physical and chemical properties

Form: liquid

Colour: colourless

Odour: characteristic

pH-value: not applicable

pH-value (1 %): not applicable

Boiling point [°C]: 60

Flash point [°C]: -26

Flammability [°C]: not determined

Lower explosion limit: 1,0 Vol.%

Upper explosion limit: 7,3 Vol.%

Combustible properties: no

Vapour pressure [kPa]: not determined

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Density [g/ml]:	0,693 20°C
Bulk density [kg/m³]:	not applicable
Solubility in water:	immiscible
Partition coefficient: n-octanol/water:	not determined
Viscosity:	<7mm²/s (40°C)
Relative vapour density determined in air:	not determined
Evaporation speed:	not determined
Melting point [°C]:	not determined
Autoignition temperature [°C]:	280
Decomposition temperature [°C]:	not determined

10. Stability and reactivity

Hazardous reactions:	Reactions with strong oxidizing agents. Evolution of highly flammable gases/vapours. Uncleaned empty vessels may contain product gases which can form explosive mixtures with air.
Hazardous decomposition products:	Flammable gases/vapours.

11. Toxicological information

Acute oral toxicity OECD 401:	Rat, > 2000 mg/kg
Acute dermal toxicity OECD 402:	Rat, > 2000 mg/kg
Acute inhalational toxicity OECD 403:	Rat, not determined
Experiences made in practice:	none
General remarks:	The toxicological information is based on the main components. The product was classified on the basis of the calculation procedure of the preparation directive.

12. Ecological information

Fish toxicity:	not determined
Daphnia toxicity:	not determined
Behaviour in environment compartments:	not determined
Behaviour in sewage plant:	not applicable
Bacteria toxicity:	not determined
Biological degradability:	not determined
COD:	not determined
BOD 5:	not determined
AOX-advice:	No dangerous components.
76/464/EC:	yes
General information:	Do not allow to enter soil, waterways or waste water. Ecotoxicological data are not available. Do not discharge product unmonitored into the environment.

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13. Disposal considerations

Disposal / Product:	Dispose of as hazardous waste. Disposal in an incineration plant in accordance with the regulations of the local authorities.
Waste no. (recommended):	070704*
Disposal / Contaminated packaging:	Uncontaminated packaging may be taken for recycling. Packaging that cannot be cleaned should be disposed of as for product.

14. Transport information

Classification according to ADR:	3
Declaration:	UN 3295 Hydrocarbons, liquid, n.o.s., 3, II
Labelling:	UN 3295
Factor (ADR 1.1.3.6):	3
LQ (ADR 3.4.6):	LQ4
Hazard-no.:	33
Label:	3
Vapour pressure [kPa]:	not determined
Classification according to IMDG:	3
Declaration:	UN 3295, Hydrocarbons, liquid, n.o.s., 3, PG: II (-26°C c.c)
Labelling:	Hydrocarbons, liquid, n.o.s., UN 3295, Class: 3
Label:	3
LQ [l, kg]:	1
EmS:	F-E, S-D
Classification according to IATA:	3 II
Declaration:	Hydrocarbons, liquid, n.o.s., Class: 3 UN 3295 II
Labelling:	Hydrocarbons, liquid, n.o.s. UN 3295
Label:	Flammable Liquid

15. Regulatory information

Labelling: The product is classified and labelled in accordance within EC-directives.

Hazard symbols:



Highly flammable.



Harmful.



Dangerous for the environment.

Contains: Naphtha (petroleum), hydrotreated light

R 11: Highly flammable. R 38: Irritating to skin. R 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R 65: Harmful - may cause lung damage if swallowed. R 67: Vapours may cause drowsiness and dizziness.

S 16: Keep away from sources of ignition - No smoking. S 2: Keep out of the reach of children. S 23.3: Do not breathe vapour. S 24: Avoid contact with skin. S 29/56: Do not empty into drains. Dispose of this material and its container at hazardous or special waste collection point. S 62: If swallowed, do not induce vomiting. Seek medical advice immediately and show this container or label. S 9: Keep container in a well-ventilated place.

15.1 Special labelling for certain preparations

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not applicable

15.2 Sources of documentation

EEC: 91/155 (2001/58); 67/548 (2004/73), 29. ATP; 1999/45 (2001/60); 91/689 (2001/118); 89/542; 1999/13
 Transport information: ADR (2005); IMDG-Code (32.Amdt.); IATA-DGR (2006)

15.3 National regulations(gb)

EH40/2002 Occupational Exposure Limits Supplement 2003

16 Other informations

(Information on ingredients - position 02)

R 11: Highly flammable.

R 38: Irritating to skin.

R 48/20: Harmful - danger of serious damage to health by prolonged exposure through inhalation.

R 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 62: Possible risk of impaired fertility.

R 65: Harmful - may cause lung damage if swallowed.

R 67: Vapours may cause drowsiness and dizziness.

16.1 Additional information:

Observe employment restrictions for people:	yes
VOC (1999/13/EG):	100 %
Customs Tariff:	not determinated

16.2 Information on ingredients

UBA-Registration: not determinated

648/2004/EG, Contains:

>30% aliphatic hydrocarbons

16.3 Modified position

none